



U.S. DEPARTMENT OF
ENERGY

Electricity Delivery
& Energy Reliability

American Recovery and
Reinvestment Act of 2009

Bridging the Gaps on Prepaid Utility Service

Smart Grid Investment
Grant Program

September 2015



Acknowledgements

The United States Department of Energy's Office of Electricity Delivery and Energy Reliability would like to acknowledge the contributions of Valerie Riedel of Energetics Inc. and Tanya Burns of Arara Blue Energy, LLC to the development of this report. Specific questions about this report may be directed to Merrill Smith, Office of Electricity Delivery and Energy Reliability (merrill.smith@hq.doe.gov). The following people contributed perspectives, observations, and lessons learned based on their experiences with prepaid energy programs.

- Jonna Buck, Amy McElheny, and John Spencer, Oklahoma Electric Cooperative
- Paula M. Carmody, Maryland Office of People's Counsel
- Ann M. Lewis and Kris Sieber, Rappahannock Electric Cooperative
- David Lewis, Tri-State Electric Membership Cooperative
- Jamie Wimberly, DEFG EcoAlign



Executive Summary

A modern electric grid offers utilities and consumers wide-ranging new opportunities. Investments made through The American Recovery and Reinvestment Act of 2009 (Recovery Act) helped catalyze the transition to a modern grid by providing the U.S. Department of Energy (DOE) with \$4.5 billion to advance the deployment of smart grid technologies. This investment, leveraged with equivalent funding from the electricity industry, has helped utilities acquire and deploy technologies that enable a more intelligent electricity delivery system, including more than 15 million smart meters, 20,000 substation monitors, and 1,000 new synchrophasors.

The large-scale deployment of smart meters and supporting technology through these projects is now enabling utilities to explore new consumer-facing programs and service offerings. Consumers, in turn, have many more choices about how they purchase electricity and manage their energy use. Prepaid utility service—which allows consumers to pay in advance for their electricity—is one area where these changes converge.



Table of Contents

Executive Summary.....	ii
1. Introduction	1
2. Consumer benefits.....	5
3. Benefits for utilities.....	11
4. Consumer advocate concerns.....	14
5. Bridging the Gaps: Resolving the Questions Around Prepay.....	16
6. Conclusion.....	19
Appendix A. Where to Find Further Information.....	20



1. Introduction

Prepay is an alternative payment option in which consumers buy a dollar amount of electricity, and utilities deduct energy usage from that balance as it is used.

Consumers receive daily notifications about their balance via phone, email, and/or text message, plus additional alerts when they reach a low or zero balance. They can add money to their account in multiple ways—by paying at a kiosk, online, by phone, or even at a drive-through window at the utility office. A zero balance results in disconnection (which typically occurs the following morning); service is reestablished a few minutes or hours after a payment is received. Some prepay plans offer protections to ensure that disconnections do not occur on weekends, holidays, or days with extreme temperatures.

Prepay has gained growing attention in recent years. The industry is seeing ongoing interest in and deployment of prepay programs around the country, and both DEFG EcoPinion consumer surveys and Navigant market research show that prepay is poised for strong growth in the near term. This growth is being

The Recovery Act Smart Grid Investments

The American Recovery and Reinvestment Act of 2009 (Recovery Act) provided the U.S. Department of Energy (DOE) with \$4.5 billion to modernize the electric power grid. Under the largest Recovery Act grid modernization initiative, the Smart Grid Investment Grant (SGIG) program, DOE and the electricity industry jointly invested \$8 billion in 99 cost-shared projects involving more than 200 electric utilities and other organizations. These projects modernized the electric grid, strengthened cybersecurity, improved interoperability, and collected an unprecedented level of performance data on smart grid operations and benefits.

The Recovery Act also enabled DOE to invest \$600 million, along with \$900 million in industry cost share, in 32 Regional Smart Grid Demonstrations and Energy Storage Demonstration projects under the Smart Grid Demonstration Program (SGDP). The program's goal was to demonstrate new, more cost-effective smart grid technologies, tools, and system configurations that significantly improve on the ones commonly used.

While the \$9.5 billion invested in these programs is small compared to the hundreds of billions of dollars the electric power industry will need to fully modernize the electric grid over the next several decades, these funds helped to build the smarter and more modern electric grid that will be needed to accomplish our nation's most important economic, energy, and environmental priorities.

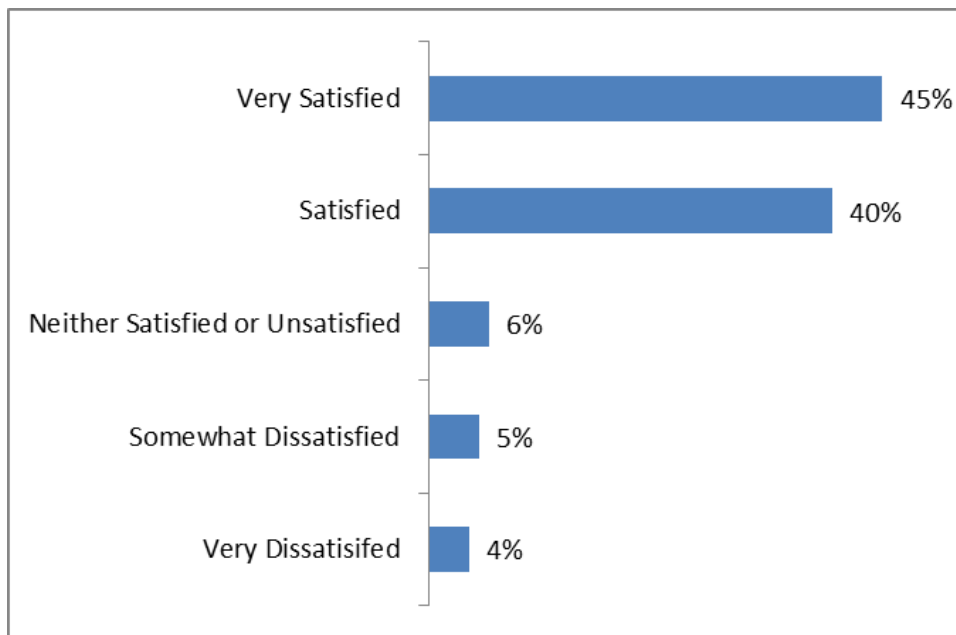
The Recovery Act investment—the largest ever one-time investment in upgrading the U.S. electric infrastructure—helped utilities take the first steps. It mitigated some of the risk of being first and helped utilities share what they learned with others so the industry can be better prepared to meet the needs of a growing digital economy, enable greater levels of clean energy deployment, and strengthen the electric grid to be more resilient to natural disasters and cyberattacks.

More information about the impacts of Recovery Act Smart Grid investments is available on SmartGrid.gov.



driven by key technology and consumer shifts, including the rollout of advanced metering infrastructure (AMI) and other smart grid technologies, the emergence of the empowered consumer, rising consumer interest in energy conservation, and the increased use of prepay options for other services (e.g., gift cards, prepaid wireless phone service, prepaid toll collection, and reloadable debit cards)—although it should be noted that, unlike these examples, electricity is an essential service.

Experience with prepay to date has revealed some early benefits, along with areas of concern. Many utilities with prepay report positive benefits for both their operations and their consumers, including improved relationships with consumers, energy savings, and high consumer satisfaction (Figure 1). However, advocates express concern about how well prepay serves consumers and whether prepay offers “second-class utility service,” in which consumers lose key protections offered in traditional utility plans. Advocates also highlight larger issues, such as affordability, that prepay alone may not be able to address.



**Figure 1. 2008 Oklahoma Electric Cooperative Customer Survey Responses:
How would you rate your overall satisfaction with OEC prepaid?**

Source: Courtesy of Oklahoma Electric Cooperative



Communicating Effectively with Consumers: Lessons Learned through SGIG Projects

With the deployment of smart grid technologies, consumers can interact with utilities in a variety of new ways to better manage their electricity use. Prepaid utility service plans are one new option being offered to consumers. Many utilities are also implementing new time-based rate, load management, and other customer-facing programs that help customers to learn their patterns of use, understand how programs will affect their rates, and make informed decisions about energy use and participation.

These technologies and programs are only effective when customers fully understand the costs, benefits, and value proposition, and decide to play a larger role in managing their electricity consumption and costs.

Sixty-five Smart Grid Investment Grant (SGIG) projects deployed smart meters and customer-based systems that provided critical opportunities for utilities and customers alike to make smarter energy choices through access to near-real-time electricity use data. These projects have offered valuable lessons learned about communicating with consumers regarding the smart grid. Utilities and other entities can leverage these lessons learned to improve consumer engagement as part of their prepay programs.

Consumer Education Strategies

- ***Smart meter and consumer system programs involve complicated equipment and require consumers to “climb learning curves” that require extensive communication and education. Utilities must be prepared to dedicate sufficient resources to the trial-and-error of the education process.***
- ***It is essential to clearly notify consumers of their bill status if they are on prepay plans or when “critical peak events” occur. Cell phone text messaging is among the most popular and effective means of consumer notification.***
- ***There is no one-size-fits-all approach to consumer education. Utilities used multiple communication channels, including text messages, emails, apps, web portals, telephone calls, bill inserts, and social media.***

Call Centers, Web Portals, and Consumer Devices

- ***Utilities are making call centers available 24/7 and designing web pages to give consumers quick access to information about their consumption and costs. Consumers want rapid and often self-guided access to the information they need.***
- ***Consumers generally like their in-home devices, and manufacturers are rapidly making changes as projects learn more about both needed and unneeded features.***

In order to balance these issues, prepay programs may need to be deployed to meet both consumer’s needs and build in consumer protections. In considering these needs, it is important to review the lessons learned from existing prepay programs and determine ways to bridge the gaps between reported benefits and advocate concerns.



DOE conducted interviews with representatives from several utilities and cooperatives, consumer advocates, and industry stakeholders to gain a broad view of the lessons learned from prepay to date. The utilities interviewed include Rappahannock Electric Cooperative and Tri-State Electric Membership Corporation, which both received federal funding through the Recovery Act, as well as Oklahoma Electric Cooperative, widely considered by industry members to have a strong and well-established prepay program. DOE focused on coops in the interview process, because coops are at the forefront of the prepay movement. The utilities also shared supporting information (e.g., presentations, educational materials, and draft papers) about their offerings and results.

To compare and contrast the utility views, DOE also interviewed various representatives of consumer advocacy organizations, including several located in regions where prepay has been considered or implemented. DOE also interviewed the CEO of Distributed Energy Financial Group, a management consulting firm focused on consumers and consumer-facing offerings in the utility sector, to review rising consumer interest in prepay plans.

Through these conversations and with further analysis, DOE compiled and reviewed lessons learned from existing prepay programs. The analysis identified several activities that could help the industry address potential weaknesses and improve prepay programs for broader adoption.



2. Consumer benefits

The prepay model can offer several key benefits for consumers.

A greater sense of control. With prepay, consumers pay on a schedule that they establish and that better matches their needs, making smaller, more frequent payments (for example, \$50 per week rather than \$200 per month), or “setting it and forgetting it” with a large initial payment that lasts for several months. They can also customize the automated notifications they receive; for example, the preferred method (e.g., email or text message) and the dollar value that will trigger a low balance notification.

No surprises on their utility bill. Prepay prevents consumers from being burdened with a huge bill they didn’t expect and will have a hard time paying. In traditional service plans, consumers are informed of their energy usage at the end of each month, but in in prepay plans, consumers cannot accrue weeks’ worth of electricity expenses before being notified of the costs. Prepay plans provide daily information about balances, expressed in terms that make sense to consumers (dollars, not kilowatt-hours). Consumers can see charges accumulate daily and recognize how these charges are adding up and how their actions are affecting usage.

In this way, prepay can prevent consumers from always being behind. Consumers don’t owe an oversized bill at the end of the month that they weren’t expecting, and in many plans, they pay low or no reconnection fees if a disconnection occurs (Table 1). They also avoid the large late fees and initial deposit requirements associated with traditional plans.

Prepaid electricity service can be compared to buying gasoline for a car; consumers fill the tank, monitor how much remains, and refill when the tank is empty. This model allows consumers to know exactly how much they are spending up front, adjust their spending based on their budget, and buy in smaller increments depending on available income. It also keeps them from spending more than they can afford. Extending the gas tank metaphor to traditional utility service, it’s as though consumers fill the tank without knowing or paying at the time of use, and they receive a fuel bill at the end of the month that could be larger than they expected.



Table 1. A Comparison of Prepay and Traditional Plan Offerings						
Utility	Oklahoma Electric Cooperative		Rappahannock Electric Cooperative		Tri-State Electric Membership Corporation	
	Prepaid	Traditional	Prepay	Traditional	Advance Pay	Traditional
Initial deposit	\$25 suggested payment, used toward prepayment balance	Up to two times the highest estimated monthly bill	\$25 toward prepayment balance	Up to the estimated amount of the two highest usage months	None	\$100–\$300 (variable)
Minimum payment	None	Full monthly bill; delinquent 20 days after bill mailing date	None	Full monthly bill by due date	None	Full monthly bill, due 15 days after bill mailing date
Additional administrative fees	Small fee for initial connection	Small fee for initial connection	\$15 administrative fee (one-time) \$15 prepay service initiation fee (one-time)	\$0	\$7 monthly fee	N/A
Late payment fees	None	Up to 10% of overdue amount	None	1.5% of overdue amount	None	5% of overdue amount
Disconnection or reconnection fees	None	\$100 disconnect fee \$100 after-hours reconnect fee Must pay all delinquent bills and collection fees	None	\$78 reconnect fee \$181 after-hours reconnect fee	None	\$65 reconnect fee \$100 after-hours reconnect fee Must pay past-due bill Possible deposit increase
Transaction fees	Free with cash and checks at OEC lobby kiosk. Fee for credit/debit and third party payment: PaySite® and MoneyGram®	Same as prepay plan	\$2.95 per EZ Pay online or phone payment \$1.50 per Western Union payment	Same as prepay plan	None	None
Can exit prepay and switch to traditional plan	Yes	N/A	Yes	N/A	Yes	N/A



A clear link between daily electricity use and electricity spending. By providing daily balance notifications, prepay allows consumers to see cause and effect. They can more directly understand the link between how much electricity they use, the activities and behaviors that impact that use, and how much they spend.

Empowered to manage budgets and prioritize spending. With daily reporting and a better understanding of the link between electricity usage and electricity bills, consumers can better manage their household budgets on prepay. They can feel like they are in control of their electricity bill, rather than the utility. Salt River Project, which has the longest-running prepay program in the country, [reported this benefit](#) in a 2010 EPRI report. David Lewis, IT Manager at Tri-State Electric Membership Corporation (Tri-State EMC), explained that “On prepay, the conversation is different. Consumers learn how far their current balance will get them and can figure out quickly if their current balance won’t stretch” to their next planned payment.

Can take action to reduce bills. Informed consumers are better able to detect changes in their electricity usage and make adjustments in the near term. This can also help them identify unexpected sources of abnormal use, such as doors left open on a cold night or malfunctioning heating and cooling equipment. “There’s something about paying ahead that makes you pay closer attention,” noted Jamie Wimberly, CEO of Distributed Energy Financial Group (DEFG).

Immediate, direct feedback has been demonstrated to lead to reduced energy consumption, which saves consumers money. Overall, stakeholders report 10%–15% reductions in energy usage with prepay. This is high compared to behavioral efficiency programs that use energy usage reports alone, which result in a 1.5%–3% reduction. In a 2008 survey of Oklahoma Electric Cooperative (OEC) prepay consumers, 85% of respondents reported feeling more conscientious and conservative about their electricity use on prepay (Figure 2), and 50% reported that monitoring usage had led to dollar savings (Figure 3).

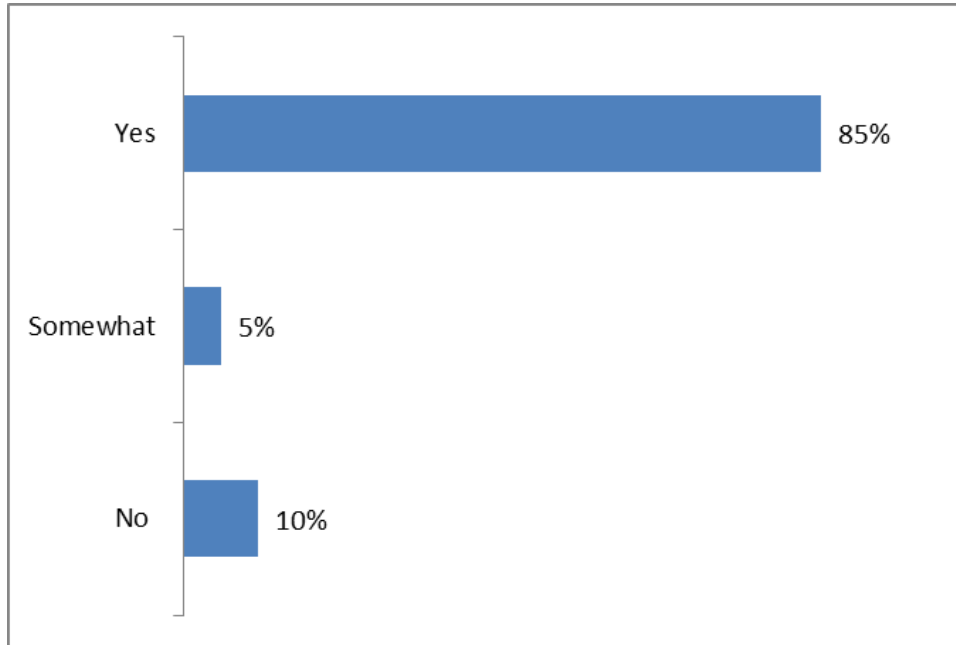


Figure 2. 2008 Oklahoma Electric Cooperative Customer Survey Responses: Do you feel you are more conscientious and conservative about your use of electricity on prepaid?

Source: Courtesy of Oklahoma Electric Cooperative

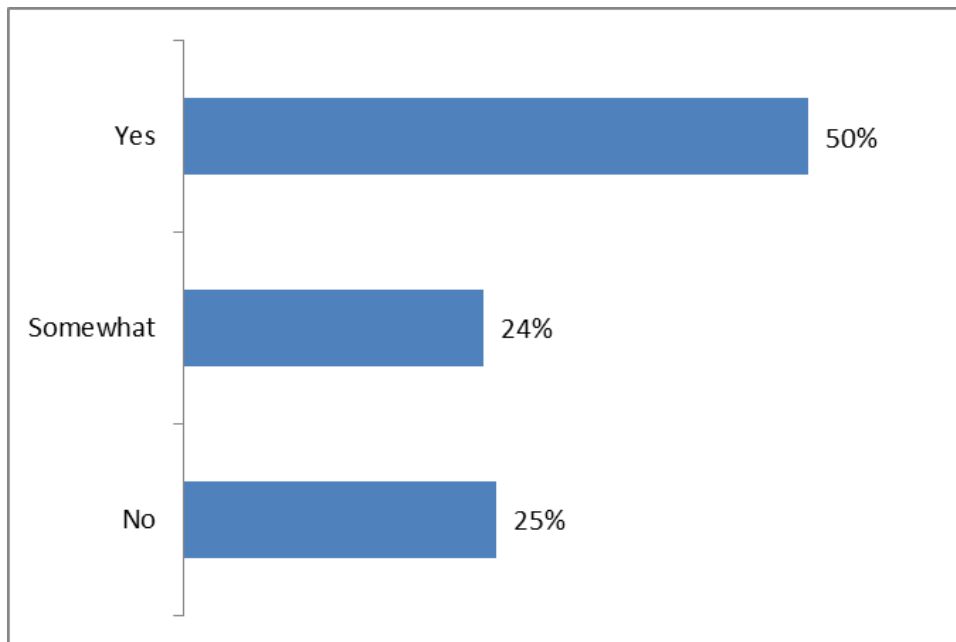


Figure 3. Oklahoma Electric Cooperative Customer Survey Responses: Has your usage monitoring led to dollar savings?

Source: Courtesy of Oklahoma Electric Cooperative



Avoiding initial fees. Utilities may require new or credit-challenged consumers to pay a large cash deposit when setting up electric service. However, these groups are often the least able to afford large cash outlays. In addition, the deposits sit idle and out of reach, when the consumer could put the money to better use in purchasing electricity or paying past debt. Prepay generally waives these types of setup fees, freeing cash for other uses.

Rapid reconnection. For consumers who experience a disconnection on prepay (due to a zero balance), reconnection can happen very quickly once payment is made. OEC reports that 43% of its prepay consumers experienced a disconnection in 2013 (Figure 4), and that 94% of its disconnected prepay members were reconnected on the same day (Figure 5), with more than half reconnected in 1–4 hours (Figure 6). And consumers in many prepay plans pay low or no fees to be reconnected.

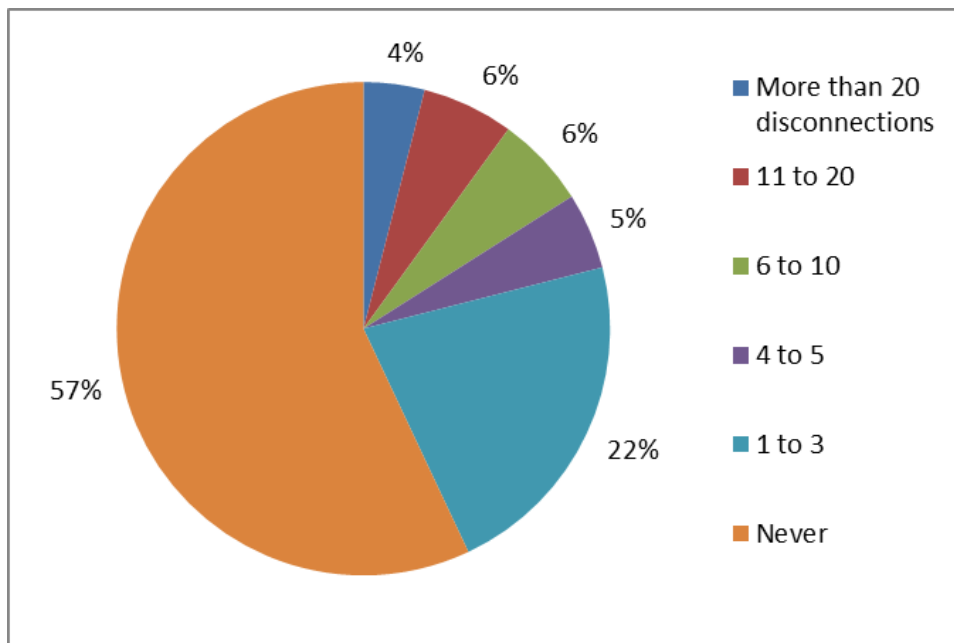


Figure 4. Oklahoma Electric Cooperative, Number of Times Disconnected for Prepaid Consumers, 2013

Source: Courtesy of Oklahoma Electric Cooperative

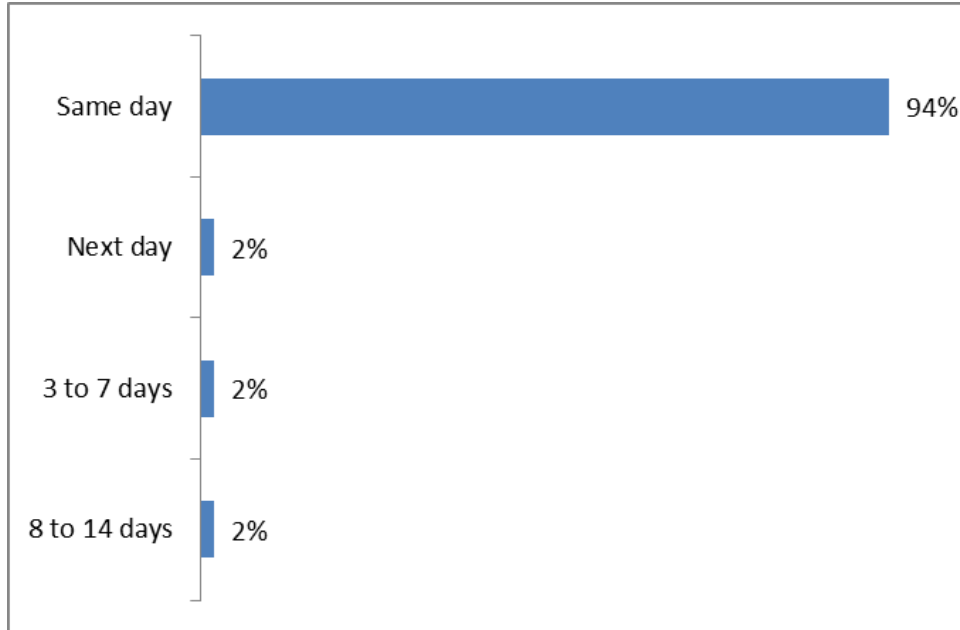


Figure 5. Oklahoma Electric Cooperative, Rate of Reconnection for Prepaid Consumers Experiencing a Disconnection, 2013

Source: Courtesy of Oklahoma Electric Cooperative

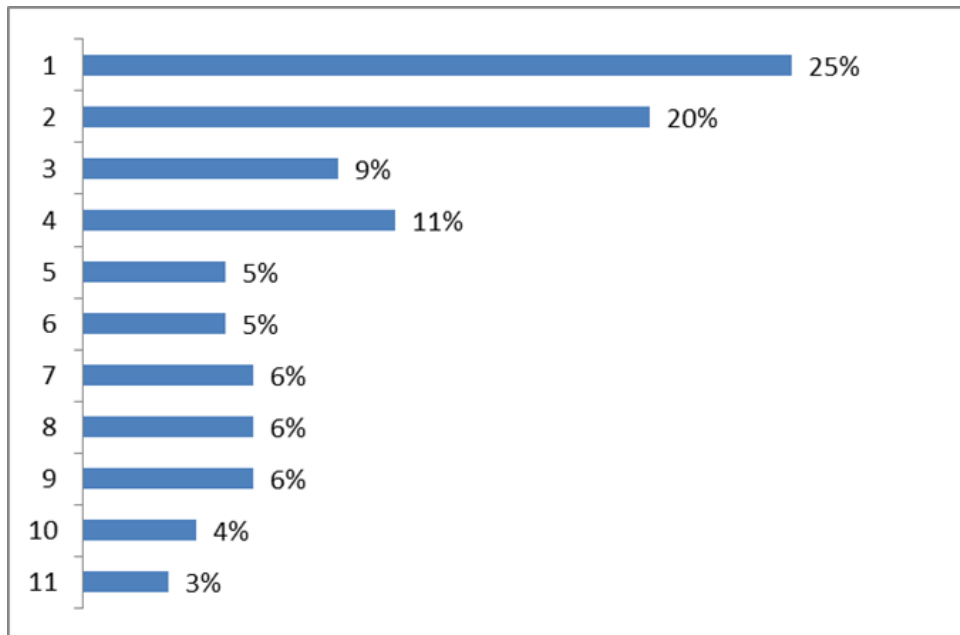


Figure 6. Oklahoma Electric Cooperative, Disconnect Duration in Hours, for Prepay Consumers Reconnected on the Same Day, 2013

Source: Courtesy of Oklahoma Electric Cooperative



3. Benefits for utilities

While prepay plans benefit consumers, they also offer benefits to utilities as well.

Better-informed consumers. Because consumers on prepay better understand the link between their usage and their spending, utilities report that they receive fewer adversarial calls from consumers, who are better able to recognize the link between their electricity use and cost, and how their payment decisions either prevent or cause disconnection. Tri-State EMC and OEC both report that after the initial rollout and adjustment period, calls became discussions of procedural issues (e.g., “I locked myself out of my account”), rather than disputes about responsibility (e.g., “There’s no way I used that many dollars’ worth of power”). Prepay can also benefit consumer service teams, giving them a new option to offer to struggling consumers.

Debt recovery through prepay payments. Some prepay plans allow consumers who owe prior balances to maintain electric service while also paying down debt. A percentage of each payment is used to purchase electricity, and a predetermined percentage goes toward the debt owed. The percentages may vary by plan or by individual (e.g., 75% toward service and 25% toward debt). Both Tri-State EMC and Rappahannock Electric Cooperative report offering this option to their prepay members. The impact of debt recovery can be notable. For example, with bad debt recovery through prepay, Tri-State EMC reduced effective residential bad debt from \$44,259 in 2011 to \$1,135 in 2013—a 97% decrease (Figure 7). And Salt River Project used debt recovery through its prepay plan to [recover more than \\$20 million](#) of outstanding bad debt

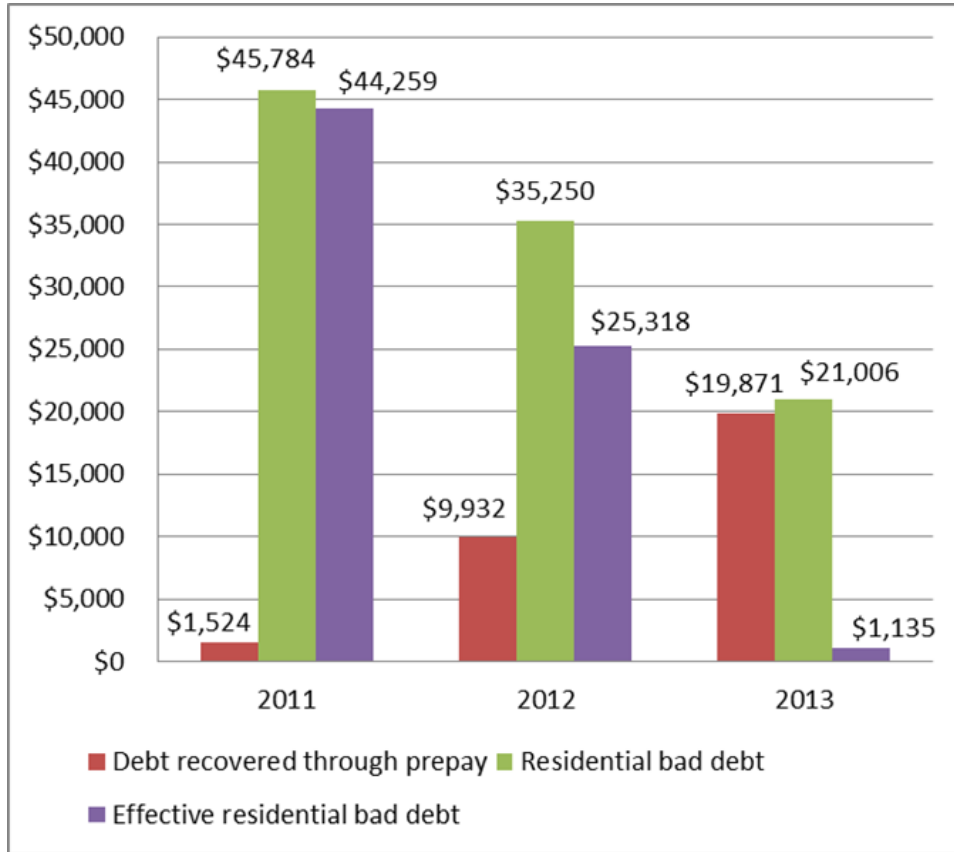


Figure 7. Bad Debt and Debt Recovery, Tri-State Electric Membership Corporation

Source: Courtesy of Tri-State EMC

Consumers can benefit from this approach, too, gaining a sense of control over their past debt while sustaining their electric service. Tri-State EMC reports that prepay consumers working to pay off debt are happy to do so, because they don't want to carry a balance owed. In fact, they feel better about how they are managing their money. Jamie Wimberly, CEO of DEFG, noted that "Low-income consumers, like everyone else, want to pay their bills, and they need new options and alternatives to do that."

Reduced write-offs and bad debt risk. Disconnections occur quickly with prepay, often no more than a few days after, and sometimes as soon as, the consumer reaches a zero balance. This shortens usage and prevents consumers from accruing large unpaid balances. As a result, prepay can reduce the utility's bad debt risk from 30–60 days of accruing balances (with traditional payment plans) to 1–4 days. Kris Sieber, Director of Member Services at Rappahannock Electric Cooperative, noted that this can benefit consumers as well as the cooperative or utility: "We want a system that not only supports members in a different way who need a different method to pay their bill and stay on track, but we also want to reduce



debt associated with the cooperative, because then we can do a better job of keeping our expenses down, which benefits all members.”

Both Tri-State EMC and OEC report significant declines in write-offs with prepay. And Tri-State EMC also reports that total bad debt is down more than 50% in 2 years, with the average residential write-off (Figure 8) declining by more than 50%. These savings can really add up. AT&T estimates that prepay would save [\\$5 million–\\$15 million a year](#) for a utility with 250,000 consumers, with 10% participating in prepay.

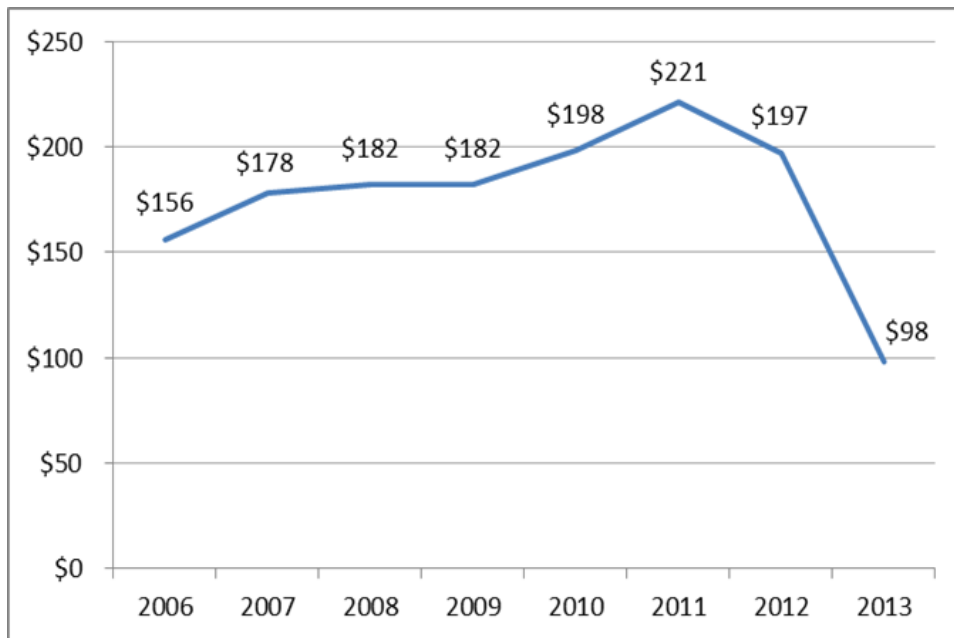


Figure 8. Average Residential Write-Off, Tri-State Electric Membership Corporation

Source: Courtesy of Tri-State EMC



4. Consumer advocate concerns

While utilities and consumers are reporting benefits from prepaid utility service, consumer advocates and other groups raise a number of concerns about how well prepay serves consumers. Advocates assert that the value of prepay to consumers needs to be demonstrated, and they ask why the benefits and positive features of prepay (e.g., information about daily usage and account balances, as well as shorter payment cycles) are not incorporated into traditional service.

Advocates' concerns include the following.

Equality of service. A key concern is that prepay offers diminished consumer protection and utility service—that prepay is a “subprime” or secondary class of service, with the same negative connotations associated with payday loans, predatory lending, and the like. One advocate describes prepay as “feeling like second-class service.”

Prepay often bypasses traditional notification requirements regarding termination of service. Automatic disconnections make it difficult or impossible to maintain some consumer protections, such as notifications by mail and “last knock” in-person visits that are required under many traditional payment models.

Paula Carmody, People’s Counsel for the State of Maryland and former President of the National Association of State Utility Consumer Advocates (NASUCA), commented: “Advocates consider prepay an inferior service. Those on prepay are losing access to consumer protections that other customers have.” She added that “There hasn’t been sufficient substantiation of the benefits to customers in prepay plans, in light of the risk of loss of consumer protections. And there has not been enough discussion of these issues when structuring these programs.”

Another concern is that with traditional service and without advanced meters, there is a lag between final notification and actual disconnection, which gives consumers additional days or weeks of service. This can be helpful if it gives them time to pay the bill, or harmful if it allows them to accrue larger bills that may be even more difficult to pay.

Additional consumer protection areas of concern include restrictions on terminations (such as during extreme weather or holidays), the ability to set up alternative payment arrangements, and access to and coordination with public assistance programs.



Marketing to low-income consumers. Advocates are concerned that low-income consumers may be targeted or feel forced into prepay programs because they don't have the resources to meet traditional utility payment requirements. For some consumers, prepay may seem like it is the only option, rather than a choice. Since prepay helps utilities recover outstanding balances, they are willing to wave large deposits or other fees that are associated with traditional services. Advocates argue that utilities try to entice consumers into prepay – through the waving of these fees – rather than offering other payment methods. DEFG reports that prepay plans historically have skewed toward low-income, younger, Hispanic, and immigrant consumers. For many years, advocates have expressed suspicion that prepay is marketed to these groups in particular. Advocates also express concern that prepay is really a collections program designed to handle slow-paying consumers, rather than a true service option for all consumers.

Doing without an essential service. Advocates worry that low-income consumers on prepay may go without electricity service—which is considered an essential service, particularly with regard to heating and cooling. They might forgo electricity service in order to purchase other necessities, or they may reach a zero balance and have their service disconnected because they do not have money to add to their account. A related obstacle is the potential lack of “elasticity” in energy demand for many consumers; they can't use less heat when it's cold or less air conditioning when it's hot.

- **Affordability.** Advocates also note that prepay doesn't resolve the underlying problem of utility service being too expensive for some consumers. There are also questions about whether prepay really saves consumers money; are monthly, transaction, and equipment fees making electricity service for prepay consumers more expensive than traditional plans, when added to the kilowatt-hour costs?



5. Bridging the Gaps: Resolving the Questions Around Prepay

The arguments around prepaid utility service benefits are unresolved. Utilities want to offer new services, and advocates want to ensure consumers are protected. Prepay is a new payment option that uses new approaches and technologies for payment, notification, information collection, and connection and disconnection. Like many other new services and products that are now possible with advanced technologies, prepay will not be a good fit for everyone. As early-adopting utilities report real benefits for their operations and for their prepay consumers, along with high consumer satisfaction, advocates continue to voice concerns about these plans. Several activities could help bridge these gaps and develop solutions that provide benefits and address key concerns.

Collecting and analyzing clearer, credible data on energy use and consumer behavior. There are two areas in particular where more detailed data is needed—disconnections and energy use reductions. Information needs to more precisely describe what’s happening and why (e.g., deprivation vs. energy conservation). Focus groups, surveys, reporting from existing plans and pilots, and other efforts can help shed light on why prepay leads to a reduction in energy use, as well as potential program considerations that could reduce the risk of deprivation in prepay plans without negating other positive benefits. This information could also help to determine whether specific features of prepay could be incorporated into traditional payment options to achieve similar usage reductions. These studies can aid utilities in designing services to help consumers conserve energy.

Additionally, disconnections under prepay are often reported differently than under traditional service, which can reduce the reliability of the data. They may be given other names (e.g., suspensions or voluntary disconnections) that are not required to be reported. While some utilities may be reporting them in the same way, consistent reporting rules that demonstrate when prepay disconnections occur would help to illuminate and document real loss of service, duration, and related issues. Regularly collected data, along with consistent terminology, would be key.

It may also be helpful to assess whether the concept and implications of “disconnection” have fundamentally changed. There is anecdotal evidence that consumer attitudes may be changing. OEC reports that some prepay consumers wait for the lights to go out—that’s their notification—because new automated meters and systems allow them to reestablish service very quickly. This is essentially the flip side of the deprivation argument; if disconnections are extremely short when they do happen, is it deprivation, or something else?



Demonstrating the value and accessibility of technology solutions used to communicate with consumers. The tools used for consumer interaction, such as automated notifications and online portals for accessing energy usage data, need to be convenient and easy to use. Gathering data on these tools' rate and ease of use, as well as the types of information that lead to changes in consumer behavior, can help the industry better understand how to most effectively communicate with all consumers (e.g., push notifications vs. information pulled from a website). For example, OEC reports that its web-based energy usage portal sees little use; consumers prefer to receive push notifications.

Exploring whether prepay has broader appeal, to better assess its challenges and benefits. Encouraging participation in prepay across a wider population could help determine whether prepay has broad appeal and could reveal additional benefits. Prepay participation currently skews toward lower-income consumers, in part because of the appeal of features such as no security deposit, no connection fees, and the ability to pay down prior balances over time. Westar currently has a prepay pilot underway in Kansas that requires participation by a wide range of income types and cannot include a disproportionate number of low-income consumers. Pilots of this type will help the industry better evaluate and address benefits and issues around prepay for a broader range of consumer groups, and they may also help determine how various groups benefit.

Using prepay plans as a learning laboratory. In some cases, membership in prepay seems to be the only way to access some desirable features, such as payment flexibility, low deposit requirements, low or no disconnection fees, daily reports on use/cost, and usage alerts. Learning how prepay benefits are achieved (e.g., why consumers are using less electricity) and how they can be extended to traditional service for all consumers will be important for future conservation efforts. This can also inform future programs and approaches for all consumers as well as low-income consumers; for example, the daily use notifications pushed to consumers in prepay plans could potentially benefit low-income consumers in traditional payment plans, and there may be ways to integrate flexible payment cycles into traditional service.

Addressing affordability as a key challenge in providing utility service. Spreading an unmanageable bill over a greater number of payments doesn't make the bill any more manageable. And fees associated with some prepay plans may wind up costing consumers more in the long run. The industry should investigate and test other opportunities to address affordability that don't require prepay or that can be incorporated into prepay programs, such as budget billing, special rates for low-income consumers, assistance programs, and other approaches for aligning billing options with payment issues. For example, some prepay programs currently coordinate with public assistance programs.



Assessing the level of consumer protection in current prepaid utility plans. [NASUCA](#) and the [National Consumer Law Center](#) have both recommended specific requirements or conditions for consumer protection to be included in prepay plans. To determine whether consumers in prepay are at risk, it may be helpful to create a consumer protection scorecard or a similar device, building from these and similar recommendations, and use it to assess the level of consumer protection in existing prepay plans.

Decoupling the issues of affordability and payment options. The debate around prepay often combines a discussion of two disparate issues: prepay's effectiveness as a payment option and its ability to make electricity service more affordable for low-income consumers. Decoupling the discussion of these two issues could help facilitate dialogue that may resolve opposing views on prepay and lead to better program designs for both prepay and traditional services.



6. Conclusion

Prepay programs show promise in giving consumers more control and in providing another payment option that can help support household budgeting and decision making. Many consumers seem happy with prepay; utilities have reported high consumer satisfaction. Prepay can also offer utilities benefits such as better-informed consumers, better debt recovery, and decreased bad debt risk. However, consumer advocates express concerns over prepay regarding the potential for loss of services and programs that may target low income customers, and they continue to highlight underlying issues, such as affordability, that prepay alone may not be able to address.

Additional research into consumer motivations and behavior under prepay programs could help bridge the gaps between reported benefits and advocate concerns, proving (or disproving) benefits to consumers. Working together, the industry as a whole can ensure that protections for consumers are not lost without thoughtful consideration and study, and that a beneficial service that could help consumers isn't discarded before we understand its true benefits and limitations.



Appendix A. Where to Find Further Information

Web Links to Related SGIG Reports and Case Studies	
SGIG Program Fact Sheets and Case Studies	<ul style="list-style-type: none">I. Tri State Fact SheetII. Tri State Case StudyIII. REC Fact SheetIV. Salt River Project Fact SheetV. NRECA Fact Sheet
Other Information on Prepay Programs	<ul style="list-style-type: none">VI. Tri State Prepay ProgramVII. REC Prepay ProgramVIII. Paying Upfront: A Review of Salt River Project’s MPower Prepaid Program (EPRI report)IX. Salt River Project Prepay ProgramX. NRECA - Conservation Impact of Prepaid Metering – Motivation and Incentives for Pre-Pay SystemsXI. Oklahoma Electric Cooperative Prepay programXII. DEFG EcoPinion No. 21 - Give the People What They Want: Prepay Energy’s Convenience and ControlXIII. DEFG EcoPinion No. 20 - New Vision Required To Better Serve Low Income Customers in Utility SectorXIV. DEFG EcoPinion No. 19 - The Conflicted Consumer Landscape in the Utility SectorXV. DEFG EcoPinion No. 18 - Prepay Energy at an Inflection PointXVI. Navigant Market ResearchXVII. NASUCAXVIII. NCLCXIX. CPUC – A review of Prepay Programs for Electricity Service